

Bloomington/Monroe County Metropolitan Planning Organization Highway Safety Improvement Program Guidelines

Overview of Procedures/Requirements

The Bloomington/Monroe County Metropolitan Planning Organization (BMCMPO) is responsible for administering the local Highway Safety Improvement Program (HSIP) process within the urbanized area, including establishing project selection procedures, soliciting projects from LPAs, evaluating project applications, and awarding funding to projects. The Indiana Department of Transportation (INDOT) retains the authority to "spot-check" the BMCMPO program to ensure that it remains faithful to State and Federal guidelines, but will not be monitoring it every step of the way.

The project selection process must address a few core elements:

- DATA DRIVEN: The process of selecting projects must be data driven. Since this is a safety program, it must utilize crash data to illustrate the need for projects, and known crash reduction factors for predicting the success of countermeasures. The primary source of crash data should be the Automated Reporting Information Exchange System (ARIES), and the primary reference for crash reduction factors should be Federal Highway Administration's (FHWA) "Desktop Reference for Crash Reduction Factors."
- FATALITY/SERIOUS INJURY CRASHES: The primary goal for HSIP is the reduction of fatality and serious injury ("incapacitating" injury) crashes. Data used to justify a proposed project must address this factor. Reduction of property damage and minor injury crashes is not a sufficient justification for a project.
- 3 YEARS BEFORE & AFTER: Federal HSIP guidelines require that crash data be evaluated at project locations for the 3 years before project implementation, and for the 3 years after the project is complete. This data will be used to evaluate the success of the selected projects. Once again, the primary source for this data should be the ARIES crash system.
- DOCUMENTED METHODOLOGY: The BMCMPO must be able to demonstrate that a logical, structured decision-making process occurs with respect to allocating the HSIP money.

In keeping with statewide goals, INDOT recommends that the BMCMPO focus on funding low-cost, high-impact projects that are spread throughout the BMCMPO. Low-cost strategies (e.g., pavement markings, lighting, curb extensions, sign enhancements, active warning systems, sight distance improvements, rumble strips, guardrails, cable barriers, etc.) are strongly preferred over high-cost strategies (e.g., roadway realignment/reconfiguration, new signals, roundabouts, etc.). High-cost projects, such as intersection reconstruction, would rapidly expend the funds and could tie up multiple years of funding. In addition, such projects would likely involve right-of-way acquisition, which would cause a significant lag in project implementation. Smaller-scale projects, without ROW issues, can be implemented much more quickly.

To ensure that HSIP funds are used in a cost-effective manner, a benefit/cost ratio greater than one (1) is required. The benefit/cost ratio is based on the relationship of the type and number of crashes to the specific countermeasures proposed. Therefore, the proposed treatment must be capable of reducing the types of crashes associated with the site. Furthermore, benefit/cost analysis may tend to favor low-cost measures, since in many cases they can achieve similar crash reductions as more expensive treatments at a much lower overall cost.

¹ http://www.transportation.org/sites/safetymanagement/docs/Desktop%20Reference%20Complete.pdf



In order to facilitate benefit/cost analysis, the BMCMPO will provide a benefit/cost spreadsheet to the Local Public Agencies (LPAs). To complete the worksheet, it will be necessary for the LPAs to consult the police reports for the crashes under consideration. At the request of the LPA, the BMCMPO can provide a list of the crash record numbers for any particular location so that the crash reports can be more easily obtained. Relationships between crash type and countermeasures are detailed in FHWA's "Desktop Reference for Crash Reduction Factors."

HSIP Fund Distribution Process

The process for distributing HSIP funds shall be as follows:

- 1. The BMCMPO identifies eligible project locations based upon ARIES Crash Data from the most recent 3-year period.
- 2. The BMCMPO issues a call for projects.
- 3. LPAs submit project applications with appropriate supporting materials.
- 4. The BMCMPO staff evaluates project applications and works with LPAs to refine their applications, if necessary.
- 5. LPAs present project applications to the Citizens Advisory Committee (CAC) and Technical Advisory Committee (TAC) for feedback. The CAC and TAC make recommendations as to whether the project should receive HSIP funding.
- 6. The Policy Committee awards HSIP funding.
- 7. The project is added to the Transportation Improvement Program (TIP), following public notice requirements.

Eligible Project Locations

In order to be eligible for HSIP funding, proposed project locations must be:

- 1. within the BMCMPO urbanized area; and
- 2. exclusive of INDOT facilities, including intersections where a non-INDOT facility intersects or adjoins an INDOT facility; and
- 3. identified in the list of the top 50 fatal/incapacitating injury crash locations, or the list of crash segments with fatal/incapacitating injuries during the most recent three year period.

LPAs may appeal to the Policy Committee to allow a project location that is not on the list of eligible project locations. Such appeals may be made concurrent to or prior to applying for HSIP funding. If the appeal is successful, the proposed location will be added to the list of eligible project locations.

Eligible Expenses

All phases of project implementation (Preliminary Engineering, Right-of-Way, Construction, and Construction Engineering/Inspection) are eligible under the HSIP program. Local Public Agencies will be required to provide a local match in the amount of 10% of the project cost. Projects providing additional local match funds may be given a higher priority over projects not providing any additional local match.

Call for Projects

The BMCMPO will release a call for projects shortly after the list of eligible project locations is produced. Project applications for locations not identified on the eligible project list (including those added through appeal) will not be considered for HSIP funding.

Project Application Requirements

LPAs will be required to include the following materials in their applications:



- 1. A narrative description of the project. The project description must address the Minimum Criteria outlined below. In particular, the following items need to be addressed:
 - a. What is the relationship between the type and number of crashes and the treatments proposed?
 - b. Is the proposed treatment the most cost-effective method for mitigating the hazards at this location?
 - c. What other types of treatments were considered and why were they rejected?
- 2. A completed Benefit/Cost ratio worksheet.
- 3. A data collection plan for pre/post treatment comparison. The data collection plan should clearly indicate the LPA's ability to evaluate the effectiveness of the project, using three years of pre-treatment data and three years of post-treatment data. The analysis should include a breakdown of the type and number of crashes in each of the six years, and the estimated benefits of the project, based on the number of crashes reduced in the three year post-treatment period. Standard crash cost estimates are incorporated into the Benefit/Cost worksheet. Crash data collection will be the responsibility of the LPA.
- 4. Preliminary cost estimates for each phase of the proposed project (e.g. PE, ROW, Construction, and Inspection Services), and a proposed timeline for completion of each phase.

Minimum Criteria for Project Selection

- 1. The project must be identified on the list of eligible projects, as provided by the BMCMPO, and amended as necessary.
- 2. The project must demonstrate a benefit/cost ratio greater than one, using the B/C worksheet provided by the BMCMPO. If the proposal consists largely of high-cost strategies, applicants must demonstrate that the potential for rectifying the problem through low-cost strategies was thoroughly evaluated and provide a compelling explanation as to why high-cost strategies were chosen. In most cases, this will involve completing a separate B/C worksheet for low-cost measures alone.
- 3. The project must be independent of other improvements. HSIP funds may not be used for a safety component of a larger project (e.g., a guardrail in a bridge project, or pedestrian signals in an intersection upgrade).



ADOPTION RESOLUTION FY 2009-03

RESOLUTION ADOPTING GUIDELINES FOR ADMINISTERING HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) GRANT FUNDS as presented to the Policy Committee of the Bloomington/Monroe County Metropolitan Planning Organization (MPO) on September 12, 2008.

- WHEREAS, the Bloomington/Monroe County Metropolitan Planning Organization (MPO) is the organization designated by the Governor of Indiana as the Metropolitan Planning Organization responsible for carrying out, with the State of Indiana, the provisions of 23 U.S.C. 134, and capable of meeting the requirements thereof for the Bloomington, Indiana urbanized area; and
- WHEREAS, the Safe, Accountable, Flexible, and Efficient Transportation Equity Act A Legacy for Users (SAFETEA-LU) established the Highway Safety Improvement Program to provide a mechanism to improve the safety of the transportation network; and
- WHEREAS, the Indiana Department of Transportation (INDOT) has determined that HSIP will be administered by MPOs in urbanized areas; and
- **WHEREAS**, the Technical Advisory Committee recommended adoption of the draft guideline at their meeting on August 22, 2008 as did the Citizens Advisory Committee on August 27, 2008.

NOW, THEREFORE, BE IT RESOLVED:

- (1) That the Bloomington/Monroe County Metropolitan Planning Organization hereby adopts guidelines to administer a Highway Safety Improvement Program for the Bloomington urbanized area; and
- (2) That the adopted guidelines shall be forwarded to all relevant public officials and government agencies, and shall be available for public inspection during regular business hours at the City of Bloomington Planning Department, located in the Showers Center City Hall at 401 North Morton Street, Bloomington, Indiana.

Kent McDaniel

Chair, Policy Committee

Bloomington/Monroe County MPO

Attest: Josh Desmond

Director

Bloomington/Monroe County MPO